Comparisons of Job Characteristics

Focus Occupation: Engineers, All Other (17-2199)

Associated Occupation: Marine Engineers and Naval Architects (17-2121)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Engineers, All Other (17-2199)

Associated Occupation: Marine Engineers and Naval Architects (17-2121)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Engineering and Technology	5.7	21.2	20.1	0	Current knowledge level may be sufficient
Design	5.2	17.6	16.5	0	Current knowledge level may be sufficient
Mathematics	9.2	15.8	17.1	0	Current knowledge level may be sufficient
Mechanical	6.8	14.9	14.0	0	Current knowledge level may be sufficient
Computers and Electronics	8.4	14.4	15.0	0	Current knowledge level may be sufficient
Physics	4.3	13.5	14.8	0	Current knowledge level may be sufficient
Production and Processing	6.0	11.1	12.9	>	Current knowledge level is likely sufficient
Building and Construction	4.0	10.6	6.6	<<	Extensive education and/or training may be required
Transportation	4.6	8.4	4.3	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 89

Focus Occupation: Engineers, All Other (17-2199)

Associated Occupation: Marine Engineers and Naval Architects (17-2121)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Operations Analysis	5.0	13.8	10.8	<<	Extensive development of skills in this area may be required
Judgment and Decision Making	9.4	13.5	12.1	<	A higher skill level may be required
Mathematics	6.2	13.5	12.8	0	Current skill level may be sufficient
Complex Problem Solving	9.1	12.8	12.7	0	Current skill level may be sufficient

Science	4.5	11.2	11.4	0	Current skill level may be sufficient
Systems Analysis	6.5	10.7	11.7	0	Current skill level may be sufficient
Technology Design	2.6	8.1	7.9	0	Current skill level may be sufficient
Management of Material Resources	3.7	7.7	5.9	<	A higher skill level may be required
Management of Financial Resources	3.3	7.6	5.8	<	A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 97

Focus Occupation: Engineers, All Other (17-2199)

Associated Occupation: Marine Engineers and Naval Architects (17-2121)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Written Comprehension	11.0	16.4	15.1	0	Current ability level may be sufficient	
Oral Comprehension	12.5	16.0	14.8	0	Current ability level may be sufficient	
Deductive Reasoning	10.6	15.6	15.0	0	Current ability level may be sufficient	
Information Ordering	9.9	14.7	13.2	<	Some improvement in abilities may be required	
Problem Sensitivity	11.1	14.4	14.0	0	Current ability level may be sufficient	
Inductive Reasoning	10.2	14.3	13.7	0	Current ability level may be sufficient	
Mathematical Reasoning	6.3	13.6	13.4	0	Current ability level may be sufficient	
Visualization	7.5	13.6	11.7	<	Some improvement in abilities may be required	
Number Facility	6.3	12.6	11.6	0	Current ability level may be sufficient	
Originality	7.6	11.8	11.8	0	Current ability level may be sufficient	
Fluency of Ideas	7.6	11.5	11.4	0	Current ability level may be sufficient	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 88

Focus Occupation: Engineers, All Other (17-2199)

Associated Occupation: Marine Engineers and Naval Architects (17-2121)

Tools and Technologies	Exclusivity
Business function specific software	1
Computer printers	2
Computers	1
Content authoring and editing software	1
Content management software	6

Data management and query software	1
Finance accounting and enterprise resource planning ERP software	2
Industry specific software	1
Information exchange software	1
Integrated circuits	18

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.